

ABSTRACT

An optical switch is presented. In a first state, a trench is filled with index matching fluid so that light from a first waveguide passes through the trench to a second waveguide. In a second state, a bubble is formed within the index matching fluid so that light from the first waveguide is reflected at the trench to a third waveguide. The bubble is formed by heat so that volume of the bubble is substantially less than total volume of the trench, resulting in pressure within the bubble not being substantially increased by pressure exerted by sidewalls of the trench.